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ABSTRACT

It was hypothesized that there is a significant difference in attitudes toward theories of learning between faculty members who assess experiential learning (EL) for award of college credit and those who do not. A questionnaire eliciting opinion on EL assessment methods and philosophy was distributed to 595 faculty members at 54 two- and four-year institutions. The questionnaire contained five statements from the behaviorist position and five from the cognitive constructionist position. Faculty were asked to respond using a six point modified Likert scale ranging from "strong support" to "strong opposition." Usable responses were received from 114 respondents who were involved in the assessment of EL and 68 who were not. Results indicated that the faculty who assess EL tend to take the cognitive constructionist position, while those who do not tend to take the behaviorist position. A literature review is included and the survey instrument is appended. (Author/DC)

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FACULTY ATTITUDES TOWARD ASSESSMENT OF EXPERIENTIAL LEARNING

BY

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ABSTRACT

TITLE: Faculty Attitudes Toward Assessment of Experiential Learning.

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This study was conducted to determine if there is a significant difference toward theories of learning between faculty who assess experiential learning and those who do not.

A questionnaire was prepared utilizing five statements from the behaviorist position and five statements from the cognitive constructionist position requesting faculty to respond using a six point modified Likert scale ranging from "strong support" to "strong opposition". Weighting factors were applied in order to determine a raw score for each of these responses. The data was then grouped into the two categories, i. e. those faculty who assess experiential learning and those who do not.

The 595 questionnaires were distributed to faculty of 54 two and four year institutions representing colleges and universities with traditional programs as well as those with well defined programs established to assess experiential learning. Out of the 201 (34%) responses returned prior to the cut-off date, 114 faculty were involved in the assessment of experiential learning, 68 were not, and 19 were unusable.

A t-test was applied to the sample means which indicated a significant difference between the two groups of faculty at the .05 level of significance and at the .001 level. By inspection, it was also determined that the faculty who assess experiential learning tended to take the cognitive constructionist position and those who do not, the behaviorist position. Both groups represented a cross section of academic disciplines.

It was recommended that another study be conducted with a pre-test, post-test structure to determine if the faculty who were selected to assess experiential learning were selected on the basis of their cognitive constructionist school of thought, or were they in fact behaviorists, or some other school of learning theory, and did the interaction with students alter their attitudes toward theories of learning.

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TITLE: Faculty Attitudes Toward Assessment of Experiential Learning.

PROBLEM: Is there a difference toward theories of learning between faculty who assess experiential learning and those who are not involved in the process?

HYPOTHESIS: There is a significant difference toward theories of learning of those faculty who have assessed experiential learning and those who have not.

Background and Significance of the Study

A. Need

The success or failure of the development of a program to assess experiential learning will depend almost totally on the perception and attitudes of the faculty as to the quality of learning experiences outside the college classroom. Since Delaware County Community College is soon to embark on such a program, Ted Quimby, Vice President for Instruction, has indicated that a study of faculty attitudes would be most helpful in providing direction as we interact with the faculty at our institution.

Faculty comments such as, "They may have acquired specific skills, but probably have shallow backgrounds and will show a lack of theoretical understanding of the subject matter." are typical of faculty who have no experience in assessing the adult "non-traditional" student for the awarding of academic credit.

There are faculty who characterize collegiate classroom teaching in terms of values in addition to skills and information acquisition. Some of these faculty are reluctant to admit that the values brought by these "non-traditional students" are acceptable since these students may reflect a different value system.

This paper attempts to seek attitudinal differences between faculty assessing experiential learning and those who are not, using statements that attempt to categorize their responses as being from the "Behavioral Position" or the "Cognitive Constructionist Position."

B. Survey of the Literature

In addition to a manual library search and use of the authors personal collection of materials on adult education and experiential learning, a computer search was conducted by the Lockheed Retrieval Service under the descriptors "External Degree" and "Theory/Experiential Learning."

Meyer, 1975, indicates that more faculty envision more stringent measures for crediting prior learning than that used on the traditional college student. Faculty also do not like to view themselves as creditors, credentialors, or evaluators. Two other faculty arguments against crediting prior learning, as noted by Meyer, were that the process is too subjective and that accrediting agencies will not allow them to grant credit for prior learning. The former argument can be countered by showing how the process is an examination and not very different from a classroom experience and the latter is not an argument at all since there is no evidence that any accrediting agency specifically prohibits the crediting of prior learning. As a matter of act, they indicate that one of their primary objectives is to encourage experimental approaches to instruction and learning.

Warren (c.p. Cross and Valley, 1974) reporting on the 1972 study of the Center for Research and Development in Higher Education at Berkeley, said that experiences adults may bring are often neither examined nor credited. Instead, a faculty member or administrator makes a judgment that an applicant's prior experiences are worth some number of credits, and the applicant is thereby placed at some position beyond the usual starting point on the path toward a degree.

Hefferlin (c.p. Cross and Valley, 1974) in the chapter titled "Awarding Cut-Rate Credits and Discount Degrees" says that external degrees and non-resident instruction complicate the task of detecting educational fraud. As long as an academic degree signified not only a certain degree of competence but also a certain amount of chair-sitting, fraud was relatively easy to identify: everyone recognized that truly "earned" degrees were awarded only after a period of inculcative servitude. In contrast to honorary degrees and to purchased degrees, they required resident study.

Hefferlin cited interim guidelines for the evaluation of non-traditional study as adopted by the Federation of Regional Accrediting Commissions of Higher Education (FRACHE) under which the regional associations are to assess the award of non-traditional degrees on the basis of criteria and competence "commensurate with the level and nature of the degrees." They are to assure that the appraisal of student performance rests on explicit standards and objective judgments rather than on merely the learner's self-appraisal.

Hefferlin concluded his chapter with five suggestions for advocates of educational experimentations:

1. In terms of state regulations, if proponents of a new educational idea have a choice of where to implement it, they will be well advised to introduce it through a publicly supported institution rather than through a private college or university unless the private institution is prestigous.

2. In terms of regional accreditation, advocates of a non-traditional program should be advised to organize it within a large and already accredited institution if they wish to avoid any difficulty--or even much contact--with the regional accrediting association.

3. In terms of all accrediting agencies, the advocates of a new program should be prepared to challenge a negative evaluation if its standards of quality match those of other existing programs.

4. Advocates of non-traditional study should recognize that other forces may be more constraining than are state regulations and voluntary accreditation, e.g. graduate and professional schools.

5. While other forces will thus also affect the non-traditional study movement, proponents of new forms of education should be presented to help lead the improvement of state regulations and voluntary accreditation--both to assure sufficient monitoring of inadequate quality on the one hand and to avoid illegitimate regulations over qualified programs on the other.

Kray and Wyman (1975), in a study dealing with policies and procedures effecting experiential learning, found the following to be representative of faculty concerns:

> Will this assessment process "water down" the academic standard of the institution? How will this affect the faculty's working conditions? Can life experience glean knowledge of the theories of the discipline or only application of it? Can a faculty member validly assess such knowledge, e.g. what are the appropriate techniques to use in a given specific situation? Would this system lessen the number of students in the division's courses?

Kray (1974) found that in institutions with programs to assess experiential learning, the faculty made the evaluating decisions in only sixty-three per cent (63%) of the cases. The remaining thirty-seven (37%) of the evaluations were conducted in the main by administrators. He also found that when the institution was unable to award credit in a specific curriculum of the college, "faculty reluctance" was given as a reason in forty-four per cent (44%) of the cases.

Boyer (c.p. Vermilye, 1974) suggests that we mix formal and informal learning throughout the adult working years in his chapter titled, "Breaking Up the Youth Ghetto." By this, he doesn't mean some vague commitment to "continuing education", a term spread like a musty blanket over all sorts of instruction for people over twenty-one. Rather, recurrent education developed for specific groups of adult students to meet specific needs.

Summerhill and Osander (c.p. Vermilye, 1974), writing on the subject of the "Educational Passport", say that it is really a composite biography and should reduce tension between those who view education as mere credentialing and those interested in the learning process. Further, the passport will permit the recording of learning experiences on the job, in the community, overseas--learning experiences which the typical academic transcript does not easily accommodate. Thus, the passport will assist in evaluating an individual's overall progress in attaining his educational goals and will help in planning the next step.

In his chapter titled, "Adult Education as Random Experiential Learning", Bergevin, 1967, states that random experiential learning takes place without planning or guidance and without an established purpose or goal. It just happens as we live. The acts involved in living, in doing what we have to do from day to day, contain a great variety of experiences from which we learn. Most of the time, we are unaware of learning taking place. Learning is incidental to what we are doing in most instances of this kind. When Bergevin wrote the above chapter and his book, the concept of assessing experiential learning had not as yet gained momentum in higher education in the United States, but his identifiers of experiential learning succinctly state the process.

Bruner, 1966, suggests four motives for learning that are essential in the education of adults. These are intrinsic motives, based on satisfaction in the actual learning experience. These motives are curiosity, competence,

identification and reciprocity. The instructor's role is to use these motivations creatively in the learning process.

Minor, 1968, said that as you plan the teaching/learning process, you should consider six aspects of group study:

1. Sensitize--whatever the topic being studies, the leader needs to sensitize the class to the issue.
2. Organize--adults are going to retain very little they do not learn for themselves; they are going to learn very little they do not discover for themselves. You must organize the teaching/learning process for discovery.
3. Research--another name for disciplined seeking. In teaching/learning, all must be responsible for the disciplined seeking of new facts, new values and new experiences.
4. Share--some facts can be learned by the isolated individual, but values can be learned best with other people.
5.-6. Decide and Act--teaching is ineffective unless the students follow through their learning to decision and action. Learning is a form of growth and change. When growth and change are not observed in the decisions and actions that follow study, the validity of the learning is doubtful.

Sharer, 1969, noted that it would be so easy, so simple, to provide teachers of adults with special training for their roles and tasks, if there were a generally accepted, scientifically demonstrated theory of learning of adults. There is no simple accepted theory of adult learning, therefore, educators also disagree about the effectiveness of techniques and methods.

Knowles, 1970, made four assumptions of adult learning wherein as a person matures:

1. His self-concept moves from one of being a dependent personality toward one of being a self-directing human being.
2. He accumulates a growing reservoir of experience that becomes an increasing resource for learning.
3. His readiness to learn becomes oriented increasingly to the developmental tasks of his social roles.
4. His time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his orientation toward learning shifts from one of subject-centeredness to one of problem centeredness.

In speaking of the need for assessing the present level of performance of the adult learner, Knowles, 1970, states that we are entering new and unexplored territory in the technology of adult education. He notes that, "Indeed, there is probably no aspect of the technology of adult education that is in greater need of creative contributions by innovative practitioners."

Knowles further points out that different kinds of performance calls for different kinds of assessment procedures. Performance assessment in the area of knowledge requires the participant to demonstrate in some way what he knows (or at least can recall). Performance assessment in the areas of understanding and insight requires that a participant demonstrate his ability to size up situations, see patterns, develop categories, figure out cause-and-effect relationships, and in general to apply knowledge and thought processes to the analysis and solution of problems. Performance assessment in the area of skills requires that the participant do the action in question and have his proficiency rated in some way. Performance assessment in the areas of attitudes, interests and values is much more difficult and even less precise than in the areas of knowledge, understanding and skill. Role playing and reverse-role playing has been used to get insight into people's attitudes and decision-making exercises can help a person discover which values he chooses under pressure. Knowles concluded that the technology has to advance much farther than it has before we can get clear assessments in these areas.

Kidd, 1969, in discussing ways in which adults learn, listed seven myths of learning. These myths alongwith a summary of his responses are as follows:

1. You can't change human nature.

   Human behavior, in very fundamental ways, is being changed every day, and human nature and human personality can be profoundly reshaped.

2. You can't teach an old dog new tricks.

   The capacity of adults to learn is enormous.

3. The "hole in the head" theory of learning.

   Many people speak of learning as if it were some process by which an entrance is somehow forced into the brain and facts are poured in. Concomitant to this notion is that the heads and minds of children are regarded as easier to penetrate than adults.

4. The all-head notion of learning.

   Man is much more than mind and intellect. Most of us have become increasingly aware that man is a creature of emotions and feelings and that these have an important part in learning.

5. The "bitter-sweet" notions.

   These contradictory views state:

   a) Learning cannot happen when it is exciting and exhilarating.

   b) There is no learning except when accompanied by harsh unpleasantness.

   What we must expect, of course, is that most of learning is difficult, wearing, repetitive--the hardest kind of work, which we accept only because of objectives we seek and satisfactions we shall earn.

6. The mental age of the average adult is twelve years.

   The adult is not just a larger child: the cells of his body are different, his experiences are vastly different. Data derived from

research with children are only useful if applied with care and if rigorously checked against adult experience as well as with data collected from systematic observation of adults.

7. Unless you have a high I.Q., all hope abandon.

   There is a great part of human life, human achievement, and human dignity, that is not at all comprehended by even the best intellectual standards. There are other kinds of worthiness to be sought after and nourished. Concentrating all attention on what is measured by rather imperfect instruments (the "intelligence tests") is to omit much of what is richest in life.

Coleman, 1974, said that experiential learning proceeds in almost reverse sequence from information-assimilation. It does not use a symbolic medium for transmitting information, and information is in fact generated only through the sequence of steps themselves. The steps are:

1. Acting
2. Understanding the particular case
3. Generalizing
4. Acting in a new circumstance

In characterizing properties of experiential learning, Coleman made the following points:

1. It is time consuming.
2. It is not at all effective when the consequence of action is separated in time or space from the action itself.

3. When consequence is perceptibly connected to action, then such experiential learning provides a direct guide to future action. There is no hurdle from a symbolic medium to action, but only modification of the action to fit the circumstance.

4. It is likely that the bypassing of symbolic media is responsible for the frequent observation in experiential learning that the student does not perform well on paper and pencil tests, although in observation of his behavior, he appears to have learned the phenomenon well.

5. Contrasted to the information-assimilation mode, in the experiential mode of learning, motivation is intrinsic. Since action occurs at the beginning of the sequence rather than at the end, the subjective need for learning exists from the outset.

6. The weakest link in the experiential process of learning appears to be in generalizing from the particular experiences to a general principle applicable in other circumstances.

7. Experiential learning appears to be less easily forgotten than learning through information-assimilation.

DEFINITION OF TERMS

1. Andragogy - the art and science of teaching adults.

2. Assessment - a valuation by authorized persons according to their discretion.

3. Behaviorist - one who believes that learning is a change in behavior occuring through stimuli and responses becoming related according to mechanistic principles.

4. Cognitive Constructionist - one who believes that learning is a process of gaining or changing insights, outlooks or thought patterns.

5. Competence - the ability to exhibit the level of performance that is requisite to the successful attainment of a particular goal.

6. Competency Objective - criteria for meeting an acceptable standard of skill.

7. Educational Contract - document specifying learning outcomes through prior sponsored and non-sponsored experiential learning and formal courses as well as delineating the plans for future learning outcomes leading to a completion credential.

8. Experiential Learning - learning that takes place independent of classroom instruction and related practices such as term papers.

   Sponsored Experiential Learning - learning that takes place under the direction of a college or university with learning outcomes defined.

   Non-sponsored Experiential Learning - learning that takes place, usually prior to enrollment in a program of study leading to a degree, and without learning outcomes defined in advance.

9. Learning - the process by which an activity originates or is changed through reacting to an encountered situation, provided that the characteristics of the change in activity cannot be explained on the basis of native response tendencies, maturation, or temporary states of the organism (e.g. fatigue, drugs, etc.)

10. Non-traditional studies - a specially-designed program based on new or unconventional forms of education free of the time and place limitations of traditional classroom instruction.

LIMITATIONS OF THE STUDY

In any study, there emerge a series of variables which cannot be controlled. This study is no exception. Therefore, the following should be noted as limitations to this study:

1. Faculty were not categorized according to discipline, e.g. humanities, business, engineering, etc.
2. Responses were solicited from faculty of two- and four-year colleges without discrimination. (An earlier study conducted by the author indicated that only fourteen two-year colleges were involved in the assessment of experiential learning and several of these were just beginning to implement a program. Due to this limited potential sample size, the possibility of comparing the responses of two-year college faculty to responses of four-year college faculty was not feasible.)
3. Faculty responding in the main as being involved in the assessment of experiential learning were restricted to those faculty who are employed by institutions who are members of the Cooperative Assessment of Experiential Learning (CAEL).
4. Faculty responding in the main as not being involved in the assessment of experiential learning were limited to the full-time faculty of Delaware County Community College and Nova participants of the Philadelphia Cluster. These Nova participants were also

asked to distribute this questionnaire to ten of their colleagues. These participants represent sixteen institutions in six states. In addition, a packet containing ten survey instruments was forwarded to fifteen professional colleagues in a variety of institutions of higher education.

5. Geographic distinctions were not considered in the selection of the sample.
6. The amount of assessment conducted, i.e., the number of students assessed by each faculty member obviously varies for the respondents. Therefore, no controls for this potential impact have been provided.
7. The administration of the questionnaire at the end of the academic year (mid-May) reduced the percentage of responses from faculty.

BASIC ASSUMPTIONS

This study makes the following basic assumptions:

1) That faculty responses on all requested statements are accurate.
2) That homogeneity of variance is operative by virtue of the assumption that the population in the sample is distributed normally.
3) That the five statements on the "Behavioral Position" and the five statements on the "Cognitive Constructionist Position" adequately represent each school of thought.
4) The number of responses are large enough so that Likert's (continuous numbers) interpretation is possible.

PROCEDURES FOR COLLECTING DATA

1. Questionnaires (See Appendix A) were given to all full-time faculty at Delaware County Community College. Multiple copies of these questionnaires were also distributed to other Nova participants in the Philadelphia cluster representing six states and a variety of two and four year institutions, asking that they complete the questionnaires themselves and ask nine colleagues in their respective institutions to do likewise. It was anticipated that most of these faculty have not been involved in the assessment of experiential learning. (See Appendix B)
2. The identical questionnaires were forwarded to the Cooperative Assessment of Experiential Learning (CAEL) Assembly institution representative asking that they distribute this instrument at random to ten of their faculty who have been involved in the assessment of experiential learning. (See Appendix B)
3. A total of 595 questionnaires were distributed. It was anticipated that 60 responses in each of the two groups was necessary for the statistical methodology to be applied.

PROCEDURES FOR TREATING DATA

Upon completion of data collection, the group was divided into one representing those faculty who have assessed experiential learning and the other for faculty who have not. The questionnaires were then scored using the weighting factors as follows:

Behaviorist Position Statement

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition
1	2	3	4	5	6

Cognitive Constructionist Position Statement

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition
6	5	4	3	2	1

The range of scores, therefore, could be from ten (10) to sixty (60). A score of ten indicates a strong "Behaviorist Position" and a score of sixty indicates a strong "Cognitive Constructionist Position." A mean for each group was tabulated and a two-tailed t-test applied to test the significance between the means using the .05 level of significance. The null hypothesis and alternative hypothesis are as follows:

H_o There is no significant difference toward theories of learning between faculty who assess experiential learning and faculty who do not.

H_a There is a significant difference toward theories of learning between faculty who assess experiential learning and faculty who do not.

If there is a significant difference, as noted above, by inspection it can be determined which position, i.e. "Behaviorist" or "Cognitive Constructionist" each group represents.

Questionnaires which were incomplete or inaccurately completed, e.g. two answers for one statement, were discarded since total scores of each had to be computed.

RESULTS

Out of the 595 questionnaires distributed, 201 were returned for a response rate of 34%. Accordingly, an adequate sample size was obtained for each group. Out of this total, 114 faculty indicated that they were involved in the assessment of experiential learning and 68 indicated they were not. Questionnaires which were unable to be used, due to incomplete data, numbered 19.

The results of the statistical calculations dictate that the null hypothesis should be rejected and the alternative hypothesis accepted:

H_o There is no significant difference toward theories of learning between faculty who assess experiential learning and faculty who do not.

H_a There is a significant difference toward theories of learning between faculty who assess experiential learning and faculty who do not.

A t-test was applied to the sample means which indicated a significant difference in responses toward theories of experiential learning between faculty who assess experiential learning and faculty who do not since the critical value of t was exceeded at the .05 level (Table I). It should also be noted that this test indicated a significant difference beyond the .001 level.

TABLE I

Analysis of Data

	Responses N	Mean Score $\bar{X}$	Standard Deviation S
Faculty Involved in Assessment	114	39.99	5.7
Faculty Not Involved in Assessment	68	35.96	6.3

$t = 4.29$ $P < .05$

Degrees of Freedom = 180

Critical Value of t at the .05 level of significance = 1.96

Critical Value of t at the .001 level of significance = 3.29

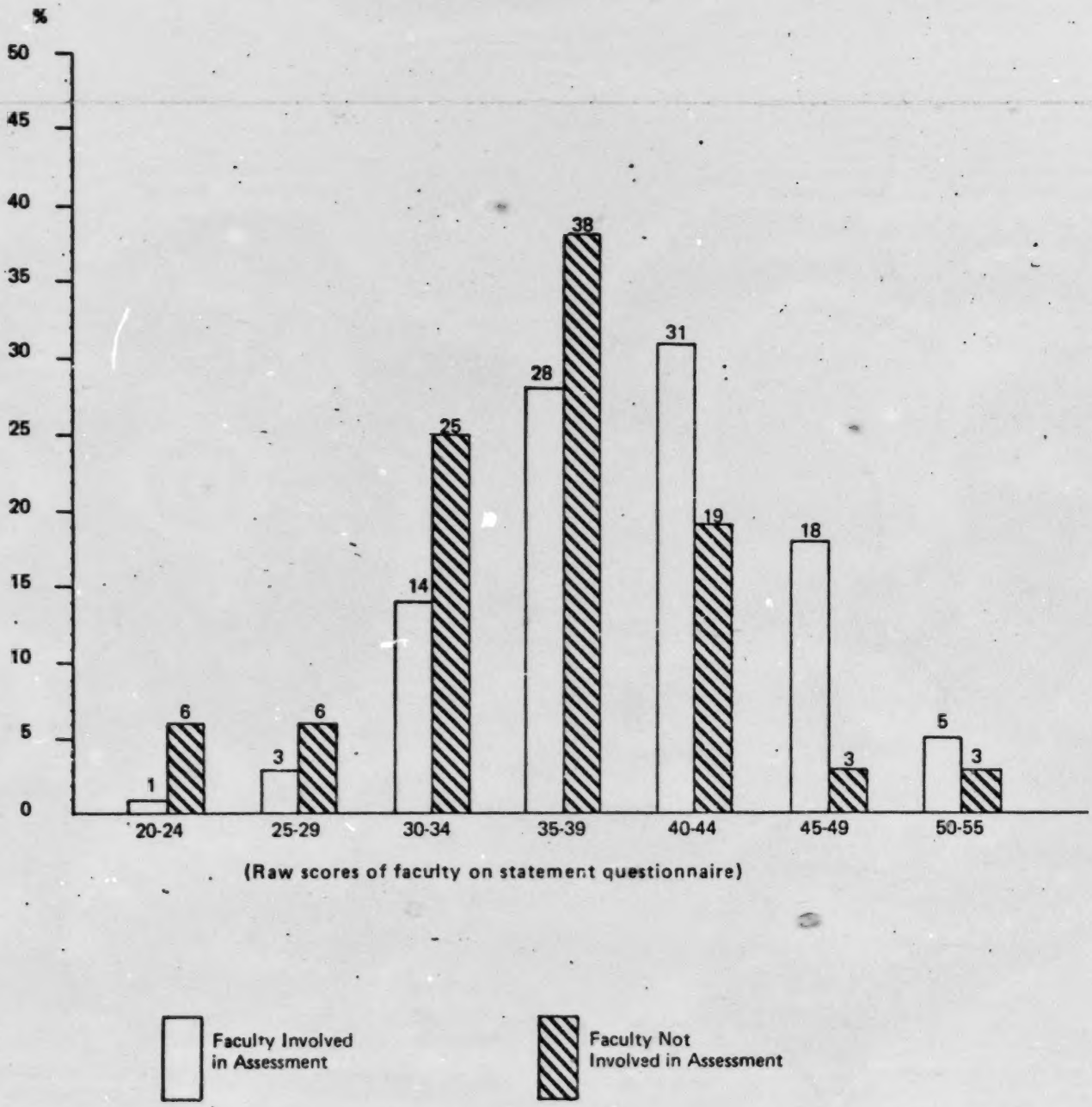
An analysis of the data shows that the calculated value of t is 4.29 compared to the critical value of t being 1.96 at the .05 level of significance and 3.29 at the .001 level of significance. In either case, the critical value of t is exceeded and we can state that there is a significant difference between the mean test scores of these two groups of faculty. In other words, the probability of there being no significant difference between these two groups is less than 1 in a 1,000.

The bar graph (Table II) groups the responses by per cent in an attempt to determine if the significant difference might have occurred due to extreme responses on the part of one or both groups. Although this does not appear to have occurred, this graph does portray the groups of scores which caused the significant difference, i.e. 40-44 and 45-49.

By inspection, it can also be determined that those faculty who assess experiential learning tend to be more from the "Cognitive Constructionist" school of learning theory and those faculty who do not , to be more from the "Behaviorist" school.

TABLE II

Component Bar Graph of the two samples by per cent



The faculty used in this sample were teaching in a variety of subject areas. The following table (Table III) examines their background by discipline.

TABLE III

Faculty Sample By Discipline

	Number Involved in Assessment	%	Number Not Involved in Assessment	%
Communications	9	7.9	9	13.2
Humanities	16	14.0	10	14.7
Social Sciences	32	28.1	7	10.3
Behavioral Sciences	12	10.5	4	5.9
Engineering (or Technology)	5	4.4	5	7.4
Allied Health	8	7.0	7	10.3
Business	17	14.9	8	11.8
Natural and Applied Science	12	10.5	15	22.1
Other	3	2.6	3	4.4
Total	114		68	

A review of the above table indicates a relatively comparable grouping of faculty in each area, however, there appear to be considerable disparity in the Social Science and Natural and Applied Science disciplines. As noted in the limitations of the study, the faculty were not categorized according to disciplines, however, the author wanted to be certain that a specific discipline did not dominate the study and possibly contaminate the data.

RECOMMENDATIONS

The results of this study probably raises more questions than it answers. A sample of these are as follows:

Is it good, bad, or indifferent that faculty who assess experiential learning are from the "cognitive constructionist" school as opposed to the "behaviorist" school of learning theory?

2. Is the above true because the faculty selected to work in this process were already "cognitive constructionists" or did working with students change their attitudes and concepts toward learning?

3. What can or should be done, if anything, in selecting faculty to assess experiential learning? Was there a "self-selection" process involved?

4. What types of faculty development programs should be planned for the faculty who are to assess experiential learning.

Needless to say, the above questions are not meant to be all inclusive, however, provide a flavor of the magnitude of the problem.

There are two recommendations that can be offered as a result of this study. The first of these is that another study be undertaken to determine if faculty, who were "behaviorists", change their attitudes or theories of learning to the "cognitive constructionist" position after they interact with students who have learned experientially. The design of this study would include a pre-test

of faculty in order to determine their school of learning theory. Those faculty who demonstrate by their responses to be from the "behaviorist" school would then be involved in the process of assessing the experiential learning of a pre-determined number of students. The post-test phase would then determine if in fact the interaction with students had any impact on their theories of learning. Those faculty who were determined to be in the "cognitive constructionist" school by the pre-test would also interact with students and then post-tested in order to see if this process had any effect on their learning theory position. This study, however, although getting at the question of faculty attitude change caused by the process of interacting with students, would not resolve the question of whether this is good, bad, or indifferent. It would seem that this question might never be answered.

The second recommendation is admittedly weaker than the first and as a matter of fact could even be undertaken after the above recommended study. To begin with, you would have to assume that it is better to have faculty who are from the "cognitive constructionist" school assess experiential learning. (This study has already demonstrated that faculty who assess experiential learning in the main are from that position of learning theory.) Probably the most efficient and affective method of moving faculty toward the "cognitive constructionist" school would be a development program that would include such concepts as cognitive mapping, affective learning, integrative teaching strategies, etc.

This faculty development program should, of course, be under the direction of an educational psychologist or learning theorist who is from the "cognitive constructionist" position. The writings of authors such as Gestalt, Bruner, Maslow and Rogers would also be included.

This recommendation could also include a pre-test, post-test methodology to determine if the faculty development program had any impact on the "behaviorists".

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APPENDIX A

Delaware County Community College
Media, Pennsylvania 19063 353-5400

May 6, 1975

MEMORANDUM

To: My Colleagues in the Assessment of Experiential Learning

From: Eugene J. Kray Dean of Instruction--Continuing Education and Non-Traditional Studies

Subject: Survey Titled, "Faculty Attitudes Toward Experiential Learning"

As you undoubtedly know by now, I have been researching a variety of aspects of the experiential learning process as part of my graduate studies at Nova University. Enclosed are ten copies of a questionnaire I would greatly appreciate your distributing to faculty who are involved in the assessment of experiential learning. These faculty may be selected at random, hopefully over a variety of disciplines. As you can see from the questionnaire and the cover letter to the faculty, I am attempting to determine if there is a difference toward theories of learning of those faculty who have assessed experiential learning and those who have not.

Your assistance in distributing this questionnaire will be greatly appreciated. If you would like to receive a copy of the abstract and summary of the findings, please complete the enclosed card and return it to me in the envelope provided.

EJK:g

Encs.

May 5, 1975

Dear DCCC Faculty Member:

I need a favor! As a part of my graduate studies at Nova University and as a part of my continuing study in the field of experiential learning and the awarding of academic credit at DCCC, I am attempting to gather data for a research project. This project has the hypothesis that there is a significant difference between attitudes of those faculty who assess experiential learning and those who have not been involved in the process. I am also attempting to determine if there is any trend toward the behaviorist or cognitive constructionist school of thought. Included in my sample will be faculty from DCCC and a sampling of faculty from institutions represented by participants in my Nova cluster and faculty from institutions who are members of the Cooperative Assessment of Experiential Learning (CAEL).

May I ask that you complete the brief questionnaire attached and return it to me through the inter-office mail by May 14, 1975. You will note that you need not place your name on the questionnaire, however, if you would like to receive an abstract of my findings, please list your name below or write to me under separate cover. Needless to say, the completion of this questionnaire is optional.

Thank you very much for your help.

Sincerely,

Eugene J. Kray

Eugene J. Kray,
Dean of Instruction--
Continuing Education and
Non-Traditional Studies

EJK:g

Attch:

Optional

Name: _____

May 1975

(Letter sent to 15 professional colleagues)

As a part of my graduate studies at Nova University and as a part of my continuing study in the field of experiential learning and the awarding of academic credit at DCCC, I am working on a practicum titled, "Faculty Attitudes Toward Experiential Learning." The hypothesis for this research paper is "there is a significant difference towards theories of learning between those faculty who have assessed experiential learning and those who have not."

Could I please ask your help by distributing the enclosed questionnaires to a variety of your full time faculty selected at random, hopefully over a variety of disciplines.

Your assistance in distributing this questionnaire will be greatly appreciated. If you would like to receive a copy of the abstract and summary of the findings, please complete the enclosed card and return it to me in the envelope provided.

Sincerely,

Eugene J. Kray,
Dean of Instruction--
Continuing Education and
Non-Traditional Studies

EJK:g

Encs.

Delaware County Community College
Media, Pennsylvania 19063 353-5400

May 2, 1975

MEMORANDUM

To: Nova Participants, Philadelphia Cluster

From: Eugene J. Kray, Dean of Instruction--Continuing Education and Non-Traditional Studies

Subject: Practicum for Learning Theory

Enclosed are ten copies of a questionnaire which I would greatly appreciate your distributing to faculty on your campus, as a part of my practicum titled, "Faculty Attitudes Toward Experiential Learning". You may, of course, complete one of the questionnaires. My hypothesis for this paper is "There is a significant difference toward theories of learning of those faculty who have assessed experiential learning and those who have not."

Your assistance in this matter is greatly appreciated.

EJK:g

Encs.

Delaware County Community College
Media, Pennsylvania 19063 353-5400

May 1, 1975

Dear Faculty Member:

I need a favor! As a part of my graduate studies at Nova University and as a part of my continuing study in the field of experiential learning and the awarding of academic credit, I am attempting to gather data for a research project. This project has the hypothesis that there is a significant difference between attitudes of those faculty who assess experiential learning and those who have not been involved in the process. I am also attempting to determine if there is any trend toward the behaviorist or cognitive constructionist school of thought.

May I ask that you complete the enclosed brief questionnaire and return it to me in the envelope provided by May 14, 1975. You will note that you need not place your name on the questionnaire, however, if you would like to receive an abstract of my findings, please list your name and address below or write to me under separate cover. Thank you very much for your help.

Sincerely,

Eugene J. Kray,
Dean of Instruction--
Continuing Education and
Non-Traditional Studies

EJK:g

Encs.

Optional

Name _____

Address _____

_____

FACULTY ATTITUDES TOWARD EXPERIENTIAL LEARNING

Definition of Experiential Learning -- Learning that takes place independent of classroom instruction, and related practices such as term papers.

A. Subject area in which you teach (check one)

Communications _____ Humanities _____ Social Sciences _____

Behavioral Sciences _____ Engineering (or Technology) _____

Allied Health _____ Business _____ Natural and Applied Science _____

Other _____

B. _____ I am not involved in the assessment of experiential learning.
_____ I am involved in the assessment of experiential learning.

C. Your assistance in answering the following as forthrightly as possible is greatly appreciated. Please circle one answer to each statement which best reflects your own personal attitude.

1. In assessing experiential learning, emphasis should be placed on testable and measurable responses.

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition

2. Divergent thinking and the evidence of creativity should be considered when assessing experiential learning.

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition

3. A student's learning experience should be assessed on the basis of that student's individual developmental needs and interests.

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition

4. Specific performance criteria should be used in the assessment of experiential learning.

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition

5. In assessing experiential learning, importance should be placed on affective and social development as well as cognitive growth.

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition

6. In measuring experiential learning, emphasis should be based on the "right" responses.

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition

7. In the assessment of experiential learning, emphasis should be placed on specific skill or information acquisition rather than "total development".

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition

8. It is important to consider convergent thinking when assessing experiential learning.

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition

9. In the experiential assessment process, learning should be viewed in overall functional terms.

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition

10. Long range developmental goals should be given more importance than immediate behavioral objectives in assessing experiential learning.

Strong Support	Moderate Support	Slight Support	Slight Opposition	Moderate Opposition	Strong Opposition

APPENDIX B

INSTITUTIONS USED IN THIS STUDY

California

California State University, Chico
Johnston College--University of Redlands
New College of California

Connecticut

*Housatonic Community College
Sacred Heart University

Delaware

*Delaware Technical and Community College

Florida

Florida International University

Illinois

Black Hawk College
De Paul University
Eastern Illinois University
Governors State University
Northeastern Illinois University
Northern Illinois University

Kansas

Johnson County Community College
Sterling College

Maryland

Howard Community College
*Towson State College

Minnesota

Minnesota Metropolitan State College

Missouri

Notre Dame College
University of Missouri, St. Louis
Webster College

New Jersey

*Cumberland County College
*Essex County College
*Glassboro State College
*Ocean County Community College
*Trenton State College

New York

Brooklyn College
College of Saint Rose
*Dutchess Community College
La Guardia Community College
*Manhattan Community College
*Medgar Evers College
St. Thomas Aquinas College
*Westchester Community College

Pennsylvania

*Bucks County Community College
*Cheyney State College
Delaware County Community College
Edinboro State College
Lehigh County Community College
*Montgomery County Community College
Our Lady of Angels College
*Penn State University
*Philadelphia College of Textile and Sciences
*Philadelphia Community College
*Temple University - School of Business
*West Chester State College
*Westmoreland County Community College
*Widener College
*York College of Pennsylvania

Tennessee

State Technical Institute at Memphis

Vermont

Community College of Vermont

Washington

Everett Community College
Fort Wright College

Wisconsin

Alverno College

* Institutions who are not members of the Cooperative Assessment of Experiential Learning (CAEL) Assembly

APPENDIX C

ABSTRACT

TITLE: The Structure and Financing of a Program to Assess Experiential Learning

AUTHOR: Eugene J. Kray, Dean of Instruction--Continuing Education and Non-Traditional Studies, Delaware County Community College, Media, Pennsylvania.

This study was conducted to determine if there was a predominant structure for the administration of a program to assess experiential learning. Another purpose was to consider various financing procedures for this concept with the hope of developing a financial model.

One hundred fifty questionnaires were distributed to institutional representatives of the Cooperative Assessment of Experiential Learning (CAEL), Princeton, N.J., asking for information on structure, current practices and finance. Out of one hundred three responses received, eighty had indicated that they were awarding or planned to award experiential learning credit; twenty indicated no and three indicated yes, but had insufficient data. These eighty institutions represented a good cross section of higher education geographically and in type.

From the data analyzed in the study, it was concluded that the process of awarding experiential learning credit is housed most often in the office of the Dean of Instruction with the faculty making most of the evaluating decisions based on documentation, interviews, letters of testimony, job descriptions and examinations.

The criteria against which to measure a person's experiential learning were competencies, courses and general background of individuals in a wide range of curricula. Forty-two percent of responding institutions indicated a range of curricula for which experiential learning credit could not be awarded with faculty and administrative reluctance being the major reasons. The maximum credits that could be awardedshowed no specific pattern and ranged from 3 to no limit.

Most institutions neither received state nor local funds for this process and forty-six percent charged no fees to students. Of these institutions charging fees, most felt that they were equitable and cost effective. Fifty-eight

percent of responding colleges reported that full time faculty who are involved in the assessment of experiential learning did so as a part of regular load with no additional compensation. Twenty-four of the eighty institutions indicated that they had a bargaining unit, but in only three cases was the question of compensation negotiated.

The data collected from community colleges was compared against the total sample with no distributive difference in any of the categories.

APPENDIX D

ABSTRACT

TITLE: Policies, Procedures and Politics Effecting Experiential Learning

AUTHORS: Eugene J. Kray, Dean of Instruction--Continuing Education and Non-Traditional Studies, Delaware County Community College, Media, Pennsylvania.

Bruce T. Wyman, Professor of Behavioral Sciences, Delaware County Community College, Media, Pennsylvania.

Assessment of Experiential Learning is a relatively new concept in higher education. This study was designed to gather information from institutions already embarked in this area to discover some of the problems encountered and to make recommendations to institutions contemplating developing such a program relative to resistances and difficulties to expect and strategies to meet such. In most cases, significant policy revisions are required and change is always fraught with potential problems.

Building on an earlier study done by one of the authors wherein eighty-six schools from the CAEL membership lists had responded, the authors sent out a preliminary survey to these same schools. After some early screening, thirty final and detailed questionnaires were distributed. Fifteen were returned. From these fifteen, depicted are six mini-case studies which approached or met the following criteria: the institutions have had an assessment of experiential learning system for at least two years, they must be currently involved with at least one hundred students per year and must have had to make policy revisions in order to implement the assessment process. Four of the six chosen schools met these requirements fully: New College of California, Northeastern Illinois University, Sterling College and Webster College. The College of Saint Rose was included although it only currently has ninety students enrolled in this program and State Technical Institute of Memphis was included even though it has only been in existence one year as it already has twelve hundred students enrolled in this program.

Using these six mini-case studies plus applicable data gleaned from six other respondees who did not approach the requisite criteria, the policies, procedures and politics are then summarized in terms of Faculty Related, Business Office, Registrar, Admissions, Accrediting and Transfer, Publicity and Obtaining a Program Director Problems. Recommendations are made to meet each of these areas of difficulties, resistances to the

concept and difficulties in implementation are delineated and dealt with. Involvement and articulation of all parties from the earliest possible time on, plus a participatory governance structure to shape and develop the policy revisions seem to be keys to early acceptance and successful development of a system for assessing experiential learning.

APPENDIX E

Calculation of t-test of the Sample Means

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}}$$

$$t = \frac{39.99 - 35.96}{\sqrt{\frac{(5.7)^2}{114} + \frac{(6.3)^2}{68}}}$$

$$t = \frac{4.03}{\sqrt{.87}}$$

$$t = 4.29$$

APPENDIX F

Calculation of Standard Deviations

$$S = \sqrt{\frac{N(\Sigma x^2) - (\Sigma x)^2}{N^2}}$$

$$S_1 = \sqrt{\frac{114(185,985) - (4559)^2}{12,996}}$$

$$S_1 = \sqrt{32.15}$$

$$S_1 = 5.7$$

$$S_2 = \sqrt{\frac{68(90,635) - (2445)^2}{4624}}$$

$$S_2 = \sqrt{40.04}$$

$$S_2 = 6.3$$

UNIVERSITY OF CALIF.
LOS ANGELES

AUG 23 1975

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